[1st February 1929

Appendix XIII.

[Vide answer to question No. 1354 asked by Diwan Bahadur R. N. Arogyaswami Mudaliyar at the meeting of the Legislative Council held on 1st February 1929, page 577 supra.]

Record of service of Mr. H. A. Irwin.

December 1895 to August 1896.	Upper Subordinate, Madras Railway Construction, Bezwada.
August 1896 to September 1898.	Assistant Engineer, Madras Railway Construction, Bezwada.
October 1898 to December 1899.	Assistant Engineer, East Coast Railway.
December 1899 to October 1902.	Engineer, Mysore and West Coast Railway Surveys and Assistant Engineer, Muthupet-Arantangi Railway construction.
October 1902 to October 1904.	Assistant Engineer and Executive Engineer, Tungabhadra Project Surveys--Madras Public Works Department.
October 1904 to April 1906.	Special Engineer, Madras Municipality, on the new Drainage Works.
May 1906 to February 1914.	Temporary Engineer, Madras Public Works Department Tank Restoration Scheme, Ootacamund Drainage Works, Salem Water Works and Madura Drainage Works.
February 1914 to September 1914.	Hyderabad State Public Works Department; Employed on new Hyderabad Town Water Works.
September 1914 to January 1919.	Went on war service to Australia—Government of India Commission to buy horses. Took horses to France, Commissioned in Remounts and later transferred to the Royal Engineers. Demobilized on 21st January 1919. Returned to India, March 1919.
August 1919 to August 1928.	Forest Utilization Officer, Forest Exploitation Officer and Forest Engineer, Madras Government.
August 1928	Joined Mettur Project.

Record of service of Mr. A. H. S. Campbell.

Temporary Engineer, Madras Public Works Department, from May 1909 to July 1915 during which period he was employed in the Cauvery Reservoir Project Investigation for one year and then as Executive Engineer in charge of the West Coast division and on the Cochin Harbour works.

From 1915—1920 was in the Royal Engineers and served in Flanders, Egypt and Mesopotamia and rose to the rank of Major.

From June 1916 to November 1916 served under Sir George Buchananon Port and River Conservancy work and later he was posted to the staff of the 3rd Corps and took part in the advance that culminated in the capture of Kut and Bagdad. On the cessation of hostilities was employed on Railway Administration and later joined the Civil Administration.

In 1919 was on deputation in England with the present Sultan of Bahrein.

1921—1923. Was engaged in private practice in Engineering.

1924—1927. Was employed as Temporary Executive Engineer in the Public Works Department Federated Shan States.

Appendix XIV.

[Vide answer to question No. 1366 asked by Mr. P. Bhakatavatsulu Nayudu at the meeting of the Legislative Council held on 1st February 1929, page 584 supra.]

First Annexure.

Qualifications of Mr. H. G. Howard, Chief Engineer for Hydro-Electric Development, Madras [vide answer to clause (b) of question No. 1453.]

Possesses technical training and experience gained in Canada and America. Member, American Institution of Electrical Engineers; Associate Member of the American Society of Civil Engineers. From 1903 to 1909 was engaged on railway survey and construction work on hydro-electric systems in Canada and California. From 1910 to 1915 was Superintendent of Construction and General Superintendent, Operation and Maintenance, Mexican Light and Power Company, work including construction of 88,000 volt sub-station, transmission units and small electric plants From 1915 –1919 was in Royal Field Artillery active service in France, India and Mesopotamia. Attained rank of Major Military Cross. From 1919—1922 was Assistant and Chief Engineer, Mexican Light and Power Company, work consisted of construction of hydro-electric plant, high pressure pipe units and steam plant; was also in charge of distribution of power, framing power contracts, tariff schedules, etc. From 1923 to date of appointment under the Madras Government was Chief Engineer, Cowdrays, White Hall Securities Corporation on hydro-electric side, in charge of construction of 30,000 horse power hydro-electric plant, pumping plant, reservoir, aqueduct, etc., in Chile. (Total scheme 70,000 kilowatts).

Second Annexure.

Technical qualifications of Mr. G. Sundaram, Personal Assistant to the Chief Engineer for Hydro-Electric Development [vide answer to clause (e) of question No. 1453.]

M.A. in Physics, Madras University.

Completed the three years' post-graduate course in Electrical Engineering at the Indian Institute of Science, Bangalore, and obtained the certificate of Proficiency in Electrical Technology.

Specialised in Hydro-Electric Engineering in France, Switzerland and England for over three years.

Served as Electrical Assistant to the Chief Engineer for Irrigation and Hydro-Electric Development for over two years.

Associate Member of the Institution of Electrical Engineers, London.